



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,289	01/12/2001	Kouji Yoshida	201976US2	8626

22850 7590 05/03/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
ABEL JALIL, NEVEEN	

ART UNIT	PAPER NUMBER
2165	

NOTIFICATION DATE	DELIVERY MODE
05/03/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

09/758,289

Applicant(s)

YOSHIDA ET AL.

Examiner

Neveen Abel-Jalil

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 95-104, 107, 108, 112 and 115 is/are pending in the application.
- 4a) Of the above claim(s) 107, 108, 112 and 115 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 95-104 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 8, 2007 has been entered.
2. The amendment filed on February 8, 2007 has been received and entered. Claims 105, and 106 have been cancelled. Claims 95-104, 107, 108, 112, and 115 are now pending, of which claims 107, 108, 112, and 115 are withdrawn from consideration, and claims 95-104 are rejected below.

Claim Objections

3. Claims 96-101, and 103-104 are objected to because of the following informalities:

The dependent claims should start with "The image processing method" and "The image processing apparatus" for consistency with the independent claims' language. Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 95 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. That claim does not recite a practical application by producing a physical transformation or producing a useful, concrete, and tangible result. To perform a physical transformation, the claimed invention must transform an article of physical object into a different state or thing. Transformation of data is not a physical transformation. A useful, concrete, and tangible result must be either specifically recited in the claim or flow inherently therefrom. To be useful the claimed invention must establish a specific, substantial, and credible utility. To be concrete the claimed invention must be able to produce reproducible results. To be tangible the claimed invention must produce a practical application or real world result. In this case the claim fails to produce a tangible result because the last element of the claim “identifying” fails to produce an output. The “identifying” is never presented, outputted, or stored in order to realize its functionality. How can one know the “identifying” has taken place without knowing its concrete, tangible, result? The claim should be amended to either “output”, “store”, or “present” the results of the “identifying”.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 102 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 102, preamble, the recitation of “for processing image data obtained by picking up an image etc.” is relative and subjective making it difficult to ascertain which part of the claimed operations are directly being controlled by a processor. There’s no processor disclosed as part of apparatus (no mention of it in the body of the claim). As a result it’s difficult to ascertain whose doing the processing between the claimed apparatus components of “dividing unit...second dividing unit... and controller”. There is also no mention of “obtaining” in the body of the claim or what component/element of the apparatus accomplishes this functionality. Therefore, it appears that nexus is missing between the intended use of the preamble and the body of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 95-104 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishi (U.S. Patent No. 6,411,386 B1).

Claim 95, Nishi discloses an image processing method of processing image data obtained by picking up an image in a predetermined image pick-up field, comprising:

setting luminance data, as a group of data, which is obtained by picking up an image pattern of an object and an image pattern of a background which exists in the predetermined image pick-up field (See column 7, lines 50-65, and see column 8, lines 47-53, and column 11, lines 33-36);

estimating N boundary candidates, wherein N is an integer of 2 or more, used to divide said group of data into a first number of sets on the basis of data values (See column 10, line s21-35, and see column 12, lines 1-15);

extracting M boundary candidates, wherein M is smaller than N, and used to divide said group of data into a second number of sets smaller than said first number, under a predetermined extraction condition, on the basis of said N boundary candidates (See column 9, lines 61-67); and

identifying a boundary between said object and said background using said M boundary candidates (See column 10, lines 35-42).

As to claim 96, Nishi discloses wherein said predetermined extraction condition includes a condition that said M boundary candidates are extracted on the basis of a magnitude of a data value indicated by each of said N boundary candidates (See column 3, lines 41-46, also see column 10, lines 6-22).

As to claim 97, Nishi discloses wherein said predetermined extraction condition includes a condition that a boundary with which said data value is maximized is extracted (See column 16, lines 31-50).

As to claim 98, Nishi discloses wherein said group of data are arranged at positions in a predetermined direction, and said predetermined extraction condition includes a condition that said M boundary candidates are extracted on the basis of respective positions of said N boundary candidates (See column 15, lines 51-63).

As to claims 99, and 103, Nishi discloses wherein said group of data are differential data obtained by differentiating image pick-up data of each of pixels obtained by picking up different image patterns in a predetermined image pick-up field in accordance with positions of said pixels, and

said data value is a differential value of said image pick-up data (See column 11, lines 25-35, and see column 11, lines 58-65).

As to claims 100, and 104, Nishi discloses wherein said N is two, and said M is one (See column 10, lines 21-24).

As to claim 101, Nishi discloses wherein said group of data are luminance data of each of pixels obtained by picking up different image patterns in a predetermined image pick-up field (See column 8, lines 47-65).

Response to Arguments

10. Applicant's arguments with respect to claims 95-104, 107, 108, 112, and 115 have been considered but are moot in view of the new ground(s) of rejection.

The Examiner continues to maintain the restriction requirement from earlier office actions and request withdrawn claims to be cancelled.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-Form 892 for list of cited references.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074.

The examiner can normally be reached on 8:30AM-5:30PM EST.

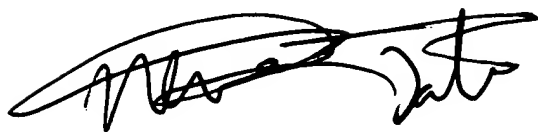
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 09/758,289

Page 8

Art Unit: 2165

A handwritten signature in black ink, appearing to read 'N. Abel-Jalil', with a long horizontal flourish extending to the right.

Neveen Abel-Jalil

April 30, 2007